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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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F. CHAU & ASSOCIATES, LLC 130 WOODBURY ROAD WOODBURY, NY 11797			EHICHIOYA, FRED I	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/925,596	Applicant(s) WANG ET AL.	
	Examiner Fred I. Ehichioya	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is Office Action is responsive to the communications file July 27, 2005.
2. Claims 1 – 33 are pending.
3. Claims 1, 13 and 22 have been amended.

Specification

4. Examiner objected to the Specification in the last Office Action regarding the disclosure on pages 9 – 11 which references "steps 110a-c in FIG. 2", but these steps are not disclosed in Fig. 2. Applicants are mute in the communication filed June 27, 2005 regarding this issues. Therefore, this objection is made final.

Response to Arguments

5. Applicants argue:
 - (a) The combination of Buist, Barr and Broka does not disclose, "wherein each of the baseforms corresponds to a different pronunciation of the publicly traded fund" (page 9, paragraph 3).
 - (b) Further the combination of Buist, Barr and Broka does not disclose "wherein the weight is determined based on a transaction volume of at least one name" (page 9, paragraph 3).
 - (c) Additionally, the combination of Buist, Barr and Broka does not disclose "wherein the baseforms are generated from grammar file," (page 9, paragraph 3).

Examiner respectfully disagrees with all allegations as argued by the applicants.

Examiner wishes to state for the record that in light of the specification:

(a) applicants disclose on page 10, lines 11 – 17 that “weight” includes “transaction volume” and that “other information may be used in conjunction with or in place of the transaction volume”.

(b) applicants disclose on page 16, lines 17 – 28 that examples of “baseform” include a “combined word”.

(c) applicants disclose on page 14, lines 11 – 25 that “grammar file” includes a plurality of entries, with each entry corresponding to a stock or mutual fund.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding the argument (a), USPN 6,501,833 issued to Phillips et al (hereinafter “Phillips”) discloses wherein each of the baseforms corresponds to a different pronunciation (see column 3, lines 51 – 64) of the publicly traded fund (see Buist: Fig. 9)

Regarding the argument (b), Buist discloses wherein the weight is determined based on a transaction volume of at least one name (see fig. 43A where IBM international has a “volume” of 980,000 and fig. 51 where Dell Computer corporation has a “volume” of 2,450,987; therefore the weights of IBM and DELL are based on their respective volumes).

Regarding the argument (c), In light of the Specification, since “baseform” include a “combined word” and “grammar file” includes a plurality of entries, with each entry

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corresponding to a stock or mutual fund; therefore the combination of Broka and Phillips disclose wherein the baseforms (see Phillips: column 3, lines 51 – 64) are generated from grammar file (see Broka: column 17, lines 18 – 27 and fig. 28 shows a plurality of entries (associated with “AS.GA”, “A.ZZ” and AAG.GA”) that includes “bid, ask and size”; these entries that include the high, low and volume are automatically updated by system on every hour”).

6. In view of the above, the examiner contends that all limitations as recited in the claims have been addressed in this Office Action.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 13 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

MPEP 2106 IV.B.2.(b)

A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. 101. Schrader, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts.

MPEP 2106.II.A

A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See *In re Warmerdam*, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994).

Claims 1; 13 and 22 in view of the above cited MPEP sections, are not statutory because they merely recite a number of computing steps without producing any tangible result and/or being limited to a practical application within the technological arts. **The use of a computer has not been indicated.**

These claims do not indicate use of hardware on which the software runs to perform the steps recited in the body of the claim. Software or program can be stored on a medium and/or executed by a computer. In other words the software must be computer-readable. **The use of a computer is not evident in the claim.**

MPEP 2106.IV.B.1(a) refers to "computer-readable" medium with computer program encoded on it."

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1 – 3, 7 – 15, 17, 19, 28, and 30 - 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,408,282 issued to Walter D. Buist (hereinafter “Buist”) in view of Phillips and further in view of USPN 5,809,483 issued to William Broka et al (hereinafter “Broka”).

Regarding claims 1 and 22, Buist teaches a method for automatically updating stock and mutual fund grammars in a speech recognition (Barr column2, lines 41 – 67) system, comprising the steps of:

automatically updating, on a pre-specified basis, a database having a plurality of entries, each entry respectively corresponding to a publicly traded stock or a publicly traded fund, and respectively comprising at least one name of the publicly traded stock or publicly traded fund (see Fig.60 and column 6, lines 25 – 61), a weight for the at least one name (see Broka: fig. 20a: “weight” in this case for the name “AS.GA or ARMCO” is either “ASK” or “SIZE”), and baseforms of the at least one name (see Broka: fig.22: this figure includes “short” and “combined words”);

wherein the weight is determined based on a transaction volume of at least one name (see fig. 43A where IBM international has a “volume” of 980,000 and fig. 51 where Dell Computer corporation has a “volume” of 2,450,987; therefore the weights of IBM and DELL are based on their respective volumes).

Buist does not explicitly teach a weight for the at least one name, automatically updating a grammar file for names in the database, the grammar file including the names and weights for the names; wherein each of the baseforms corresponds to a different pronunciation of the publicly traded fund, and wherein the baseforms are generated from grammar file,

Broka teaches a weight for the at least one name (see Broka: fig. 20a: "weight" in this case for the name "AS.GA or ARMCO" is either "ASK" or "SIZE"), and baseforms of the at least one name (see fig.22: this figure includes "short" and "combined words").

automatically updating a grammar file for names in the database, the grammar file including the names and weights for the names (see fig.28; column 15, lines 4 – 11, column17, lines 15 – 27 and column 21 lines 65 – 67; fig. 28 shows a plurality of entries (associated with "AS.GA", "A.ZZ" and AAG.GA") that includes "bid, ask and size"; these entries that include the high, low and volume are automatically updated by system on every hour").

Phillips et al (hereinafter "Phillips") discloses wherein each of the baseforms corresponds to a different pronunciation (see column 3, lines 51 – 64) of the publicly traded fund (see Buist: Fig. 9).

Broka and Phillips disclose wherein the baseforms (see Phillips: column 3, lines 51 – 64) are generated from grammar file (see Broka: column 17, lines 18 – 27 and fig. 28 shows a plurality of entries (associated with "AS.GA", "A.ZZ" and AAG.GA") that

includes "bid, ask and size"; these entries that include the high, low and volume are automatically updated by system on every hour").

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Phillips' teaching of wherein each of the baseforms corresponds to a different pronunciation would have allowed Buist's system to provide a speech recognition system which facilitates the rapid addition of words to the vocabulary of the system as suggested by Phillips at column 2, lines 65 - 67.

Further, "automatically updating a grammar file for names in the database, the grammar file including the names and weights for the names" as thought by Broka would prove Buist and Phillips' system a computerized bond trading system to gather quote and trade information from several bond traders and other users, and to organize and disseminate such information quickly and reliably as suggested by Broka at column 1, lines 56 - 60.

Regarding claims 2, 14, and 23, Buist teaches the steps of:

automatically identifying, from web sites, stocks and funds that are no longer listed on a market (see column 10, lines 25 – 50); and

automatically removing from the database any of the plurality of entries corresponding to the identified stocks and funds (see column 10, lines 53 – 54).

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Regarding claims 3 and 24, Buist teaches the steps of:

automatically identifying, from web sites, newly listed stocks and newly listed funds, if any (see column 10, lines 26 – 34); and

automatically creating an entry in the database for each of the newly listed stocks and the newly listed funds (see column 11, lines 1 – 14).

Regarding claims 7, 17 and 28, Buist teaches the steps of:

automatically combining short words in the database to form combined words, a short word being a stock name or a fund name that has less than a predefined number of phonemes (see Figs. 5, 51 and column 34, lines 40 – 65);

Broka teaches automatically generating the baseforms for the combined words; and updating the grammar file to include the combined words (see fig.22: this figure includes “short” and “combined words”).

Regarding claims 9 and 30, Buist teaches wherein said step of updating the database is performed on a pre-specified basis (see column 17, lines 44 – 47).

Regarding claims 10 and 31, Buist teaches wherein the pre-specified basis is daily (see column 36, lines 20 – 27).

Regarding claims 11, 19 and 32, Buist teaches wherein each of the plurality of entries further comprises one of corresponding resolved stock names or corresponding resolved fund names, if any (see column 14, line 60 thru column 15, line 26).

Regarding claims 12, 20 and 33, Buist teaches wherein each of the plurality of entries further comprises corresponding stock nicknames or corresponding fund nicknames, if any (see Fig. 8).

Regarding claim 13, Buist teaches a method for automatically updating stock and mutual fund grammars in a speech recognition (Barr column 2, lines 41 – 67) system, comprising the steps of:

constructing a database having a plurality of entries, each entry respectively corresponding to a publicly traded stock or a publicly traded fund, and respectively comprising at least one name of the publicly traded stock or publicly traded fund (see column 10, line 63 thru column 11, line 14), a weight for the at least one name (see Broka: fig. 20a: “weight” in this case for the name “AS.GA or ARMCO” is either “ASK” or “SIZE”), and baseforms of the at least one name (see Broka: fig.22: this figure includes “short” and “combined words”);

automatically updating the database on a pre-specified basis, including adding new entries for newly listed stocks and newly listed funds and removing any of the plurality of entries corresponding to newly unlisted stocks and newly unlisted funds (see column 10, lines 53 – 54);

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wherein the weight is determined based on a transaction volume of at least one name (see fig. 43A where IBM international has a "volume" of 980,000 and fig. 51 where Dell Computer corporation has a "volume" of 2,450,987; therefore the weights of IBM and DELL are based on their respective volumes).

Buist does not explicitly teach a weight for the at least one name, generating a grammar file for names in the database, the grammar file including the names and weights for the names.

automatically updating the grammar file with respect to the newly listed stock names and the newly listed fund names; and wherein each of the baseforms corresponds to a different pronunciation of the publicly traded fund

Broka teaches a weight for the at least one name (see Broka: fig. 20a: "weight" in this case for the name "AS.GA or ARMCO" is either "ASK" or "SIZE"),

generating a grammar file for names in the database, the grammar file including the names and weights for the names (see fig.28; column 15, lines 4 – 11, column 17, lines 15 – 27 and column 21 lines 65 – 67; fig. 28 shows a plurality of entries (associated with "AS.GA", "A.ZZ" and AAG.GA") that includes "bid, ask and size"; these entries that include the high, low and volume are automatically updated by system on every hour");

automatically updating the grammar file with respect to the newly listed stock names and the newly listed fund names (see fig.28; column 15, lines 4 – 11, column 17, lines 15 – 27 and column 21 lines 65 – 67: "entries that include the high, low and volume are automatically updated by system on every hour"); and

Phillips et al (hereinafter "Phillips") discloses wherein each of the baseforms corresponds to a different pronunciation (see column 3, lines 51 – 64) of the publicly traded fund (see Buist: Fig. 9).

Broka and Phillips disclose wherein the baseforms (see Phillips: column 3, lines 51 – 64) are generated from grammar file (see Broka: column 17, lines 18 – 27 and fig. 28 shows a plurality of entries (associated with "AS.GA", "A.ZZ" and AAG.GA") that includes "bid, ask and size"; these entries that include the high, low and volume are automatically updated by system on every hour").

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Phillips' teaching of wherein each of the baseforms corresponds to a different pronunciation would have allowed Buist's system to provide a speech recognition system which facilitates the rapid addition of words to the vocabulary of the system as suggested by Phillips at column 2, lines 65 - 67.

Further, "automatically updating a grammar file for names in the database, the grammar file including the names and weights for the names" as thought by Broka would prove Buist and Phillips' system a computerized bond trading system to gather quote and trade information from several bond traders and other users, and to organize and disseminate such information quickly and reliably as suggested by Broka at column 1, lines 56 - 60.

Regarding claim 15, Buist teaches wherein said step of adding the new entries for the newly listed stocks and the newly listed funds comprises the step of automatically identifying, from web sites, the newly listed stocks and newly listed funds, if any (see column 10, line 63 thru column 11, line 28).

Regarding claim 21, Broka teaches wherein said step of updating the database comprises the step of automatically generating baseforms of the newly listed stock names and the newly listed fund names (see fig.22: this figure includes “short” and “combined words”).

10. Claims 4 – 6, 16, 18, 25 – 27, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buist in view of Phillips and further in view USPN 5,761,442 issued to Dean S. Barr et al (hereinafter “Barr”).

Regarding claims 4 and 25, Buist, Phillips and Broka disclose the claimed subject matter as discussed in claims 1 and 22 respectively. Buist teaches the steps of:

generating the baseforms of the names of the newly listed stocks and the newly listed funds (see column 11, lines 54 – 67).

Buist does not explicitly teach determining the weights for the names of the newly listed stocks and the newly listed funds.

Barr teaches determining the weights for the names of the newly listed stocks and the newly listed funds (see column 4, lines 51 – 57).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Barr's teaching of weights that form the basis of long term portfolio would have allowed Buist, Phillips and Broka's system to provide a method for stock selection on the basis of appreciation potential parameters estimated using a neural network system for each stock in a given capital market as suggested by Barr at column 3, lines 33 – 51.

Regarding claims 5, 16 and 26, Buist, Phillips and Broka disclose the claimed subject matter as discussed in claims 1, 13 and 22 respectively. Buist teaches the steps of:

identifying the transaction volumes of any stocks and funds for which an entry exists in the database (see Fig. 6 step 677 and column 13, lines 14 - 40);

quantizing the transaction volumes into a plurality of bands (see column 13, lines 27 – 40).

Buist does not explicitly teach assigning a corresponding weight to each of the plurality of bands.

Barr teaches assigning a corresponding weight to each of the plurality of bands (see column 4, lines 51 – 57).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Barr's teaching of weights that form the basis of long term portfolio would have allowed Buist, Phillips and Broka's system to provide a method for stock selection on the basis

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of appreciation potential parameters estimated using a neural network system for each stock in a given capital market as suggested by Barr at column 3, lines 33 – 51.

Regarding claims 6 and 27, Barr teaches wherein a given corresponding weight assigned to a given band corresponds to each of the names of any of the stocks and funds in the given band (see column 2, lines 2 – 11).

Regarding claims, 18 and 29, Barr teaches wherein said step of updating the database comprises the step of automatically adapting the weights for the names in the database, based upon a transaction volume over a predetermined period of time (see column 7, line 66 thru column 8, line 18).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 571-272-4034. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred I. Ehichioya
Patent Examiner
Art Unit 2162

September 4, 2005


SHAHID ALAM
PRIMARY EXAMINER